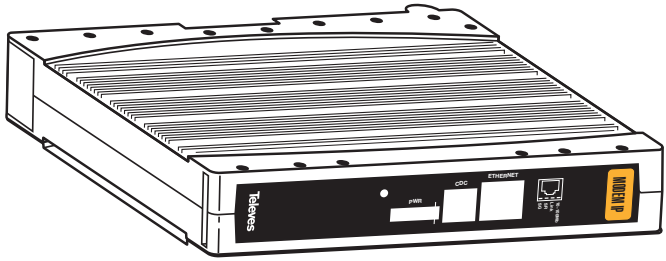
Televes

MODEM IP



Ref. 5837

User Manual

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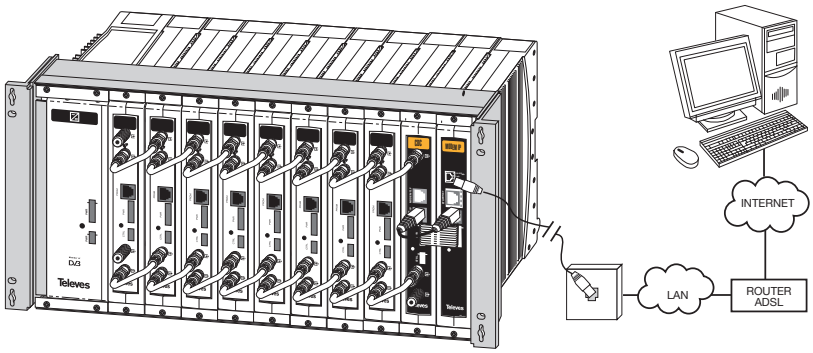
INTRODUCTION

Televés IP Modem

The IP MODEM lets you control Televés controllable headends from anywhere in the world using an Internet connection.

Typical application



To control a headend from any PC, it is necessary to have installed the appropriate CDC software version (2.11 or upper), the “VSP Manager” program and the connection file which is unique to each IP MODEM. The necessary softtware together with the connection file is on the CD that comes with the products. (See installation section). The PC requirements can be found in the CDC software manual.

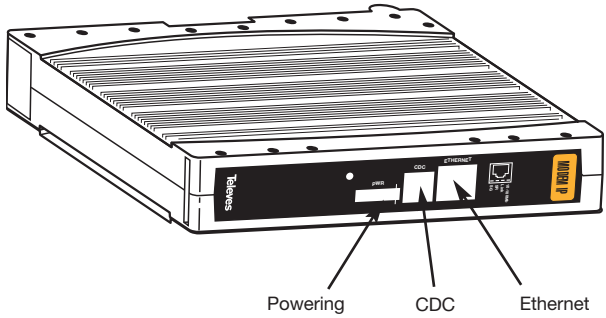
System requirements

- To use the device, you need an internet connection to connect the IP Modem
- The appropriate CDC Software (2.11 or upper) installed in the PC from which to control the headend.
- The Software VSP Manager installed in the PC earmarked for head-end control. The operating system of the PC earmarked for head-end control should be Windows XP, and it will shortly become available for Windows Vista
- Connection file for that IP MODEM

Packet contents “Televés IP Modem”

- IP MODEM
- Cable feed connector
- An RJ45 crossover cable (with red ends)
- A cable to connect the IP MODEM with the CDC module
- An installation CD (include manual)

GETTING TO KNOW THE TELEVÉS IP MODEM



Modem ports

Ethernet

Connect the MODEM-IP to the LAN using an RJ45 cable or directly to the DSL router using an RJ45 crossover cable (with red ends). It is also used to change the IP address of the MODEM connecting it directly with the PC network card using an RJ45 crossover cable.

CDC

Connect the MODEM-IP to the CDC module, use the cable provided (not crossover)

Powering connector

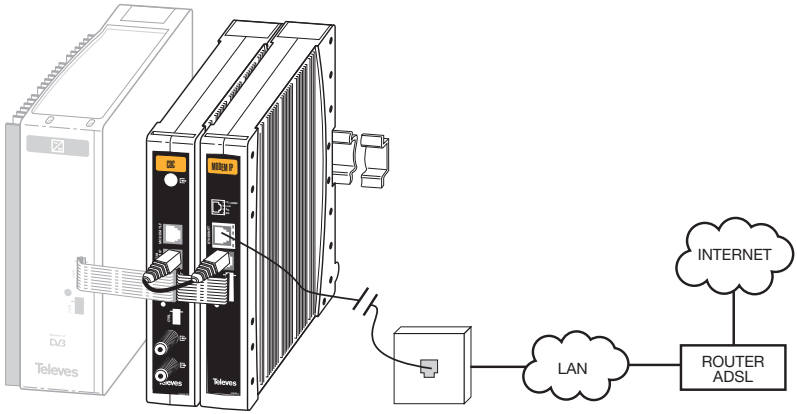
Connection to T05 feed source should be done with the cable connector supplied, whether connection is to the source itself or to any already fed T05 module (see details in Feed Source Data Sheet).

INSTALLATION OF THE MODEM-IP

- To connect the MODEM-IP to the CDC module, use the cable provided (not crossover) and connect the “PRGM IP MODEM” connector (on the CDC module) to the connector labelled “CDC” (on the IP MODEM module), as can be seen in figure 1.

  Important: In the older CDC modules, the “PRGM IP MODEM” connector is labelled only as “PRGM”

- To connect the MODEM-IP to the LAN (or directly to the DSL router) use the connector labelled “ETHERNET” as can be seen in figure 2.



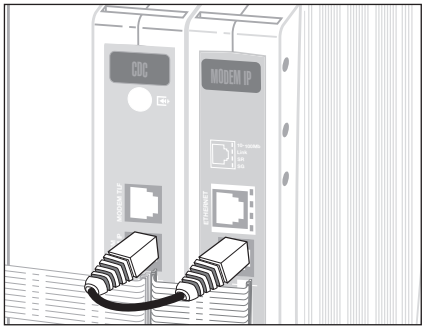


Fig. 1

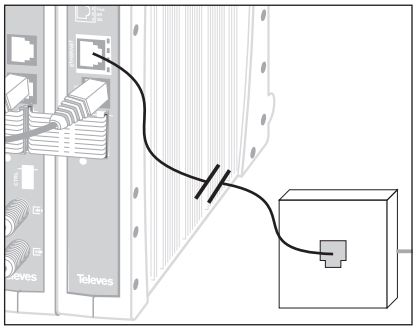
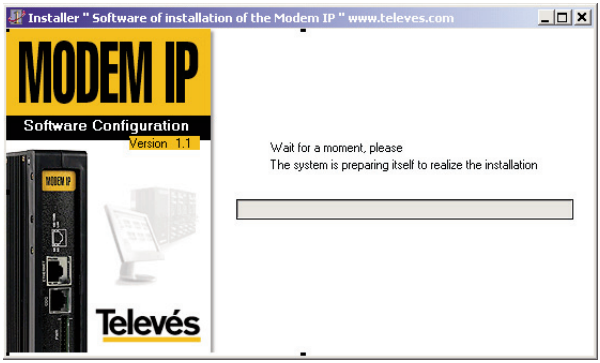


Fig. 2

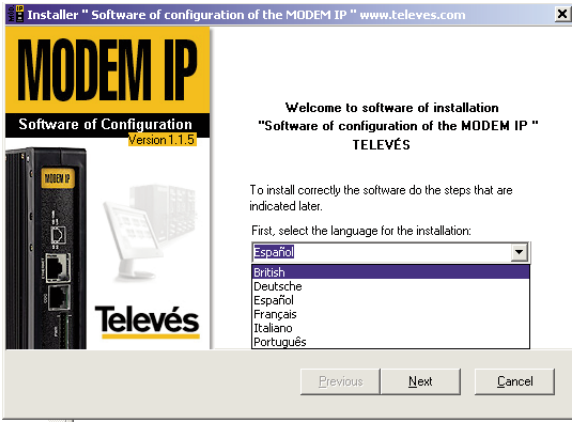
INSTALLATION OF THE SOFTWARE

If the installation does not start automatically, access the CD and press “Setup.exe”. Follow the instructions that appear onscreen.

When you execute “Setup.exe” and the program starts, a screen such as the one below will appear with a bar that indicates the progress of the preparation of the system to carry out the installation, this process may take some time depending on the equipment where installation is to be made.

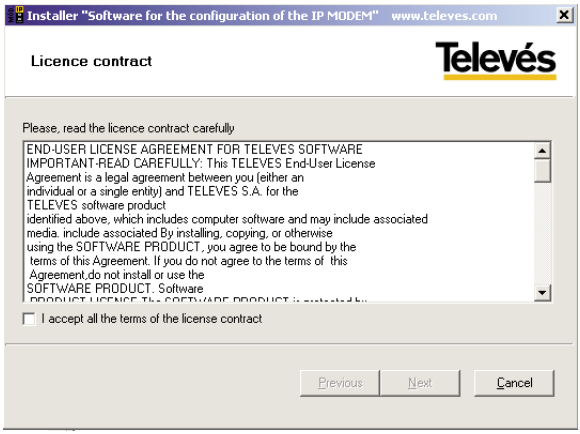

Installer " Software of installation of the Modem IP " www.televes.com
MODEM IP
Software Configuration
Version 1.1
Wait for a moment, please
The system is preparing itself to realize the installation
Televés

Then the following screen will appear, where you must choose the language for the installation.



Choose the language from the drop-down menu, once the language has been selected as indicated in the program, press the Next button to continue.

The licence screen will appear. You must accept the licence terms to be able to continue, if you do not accept these terms the software will not let you continue with the installation.

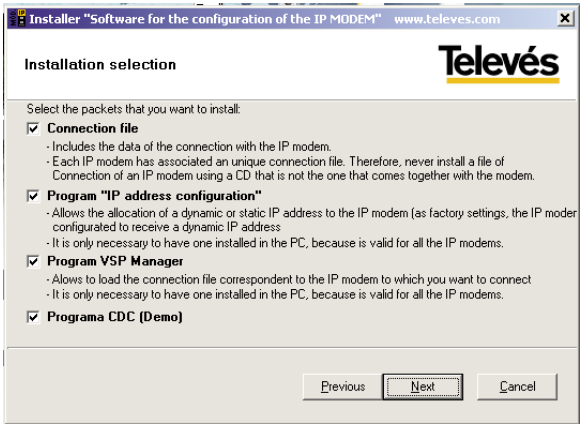

Installer "Software for the configuration of the IP MODEM" www.televes.com
Licence contract
Televés
Please, read the licence contract carefully
END-USER LICENSE AGREEMENT FOR TELEVES SOFTWARE
IMPORTANT-READ CAREFULLY: This TELEVES End-User License
Agreement is a legal agreement between you (either an
individual or a single entity) and TELEVES S.A. for the
TELEVES software product
identified above, which includes computer software and may include associated
media. include associated By installing, copying, or otherwise
using the SOFTWARE PRODUCT, you agree to be bound by the
terms of this Agreement. If you do not agree to the terms of this
Agreement,do not install or use the
SOFTWARE PRODUCT. Software
I accept all the terms of the license contract
Previous
Next
Cancel

Once the terms have been accepted, click on the Next button to enter the selection screen; this screen has got 3 options to install:

- **The connection file** that is unique for each MODEM-IP, this contains the necessary connection data for this modem, therefore, it is very important to have each IP MODEM identified with its configuration file. This file will be installed in the route that you will select for the installation in "….\\FileCDC". As you will see in the section dealing with the headend connections, it will be necessary to load the "VSP Manager" program before connecting, in this way the CDC software will identify the headend to which it should get connected. The name of this file is the serial number of the MODEM to which it is connected using the vsp extension , we recommend re-naming this file with a more descriptive name for example "Hotel las palmas.vsp" but always maintaining the ".vsp" extension.

-**"Configuration of the IP address" program**. It is important to note that all the IP Modems are configured by default to automatically obtain a dynamic IP address. This program will let you give a static IP address to your MODEM-IP. If you have already installed this program in your PC, it is not necessary to re-install it for each modem.

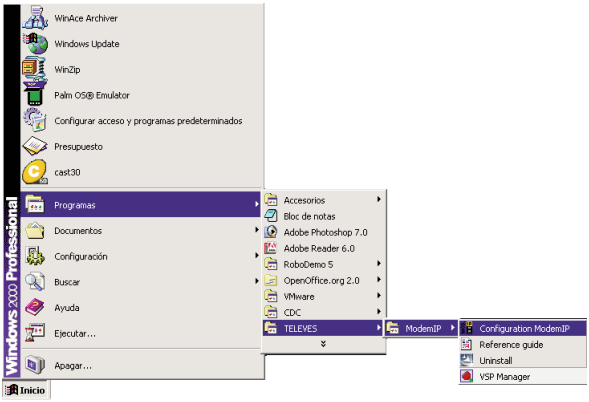
-**"VSP Manager" program**. This lets you load the connection file so that the CDC software gets connected to the IP MODEM and therefore with the headend that corresponds to that file. It is only necessary to install this once per PC


Installer "Software for the configuration of the IP MODEM" www.televes.com
Installation selection
Televés
Select the packets that you want to install:
Connection file
- Includes the data of the connection with the IP modem.
- Each IP modem has associated an unique connection file. Therefore, never install a file of Connection of an IP modem using a CD that is not the one that comes together with the modem.
Program "IP address configuration"
- Allows the allocation of a dynamic or static IP address to the IP modem (as factory settings, the IP moder configurated to receive a dynamic IP address
- It is only necessary to have one installed in the PC, because is valid for all the IP modems.
Program VSP Manager
- Alows to load the connection file correspondent to the IP modem to which you want to connect
- It is only necessary to have one installed in the PC, because is valid for all the IP modems.
Programa CDC (Demo)
Previous
Next
Cancel

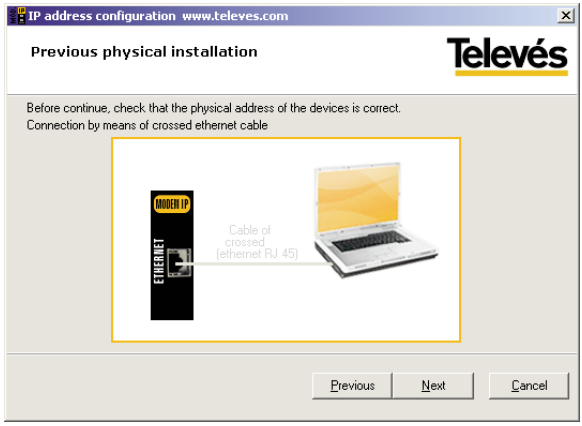
CHANGING THE STATIC OR DYNAMIC IP ADDRESS OF THE MODEM

All the IP Modems are configured by default to automatically obtain a dynamic IP address. This program lets you give a static IP address to your IP MODEM (or change from static to dynamic IP). To do so, follow these steps:

- Execute the “Configuration IP Modem” program



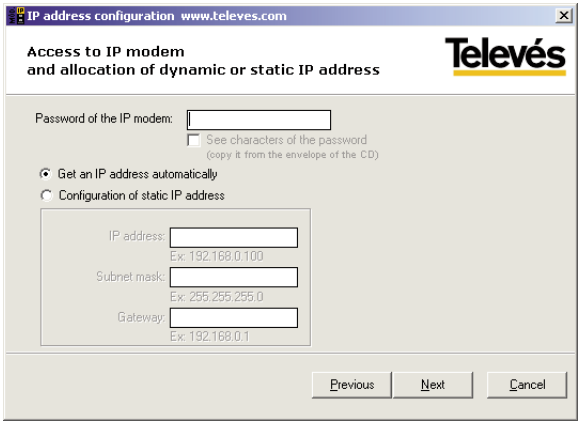
Next, you can see how to connect the MODEM directly to the PC using a crossover cable, that is different from the rest because it has a red mark at each end, remember that you will not be able to connect more than one IP MODEM at a time.



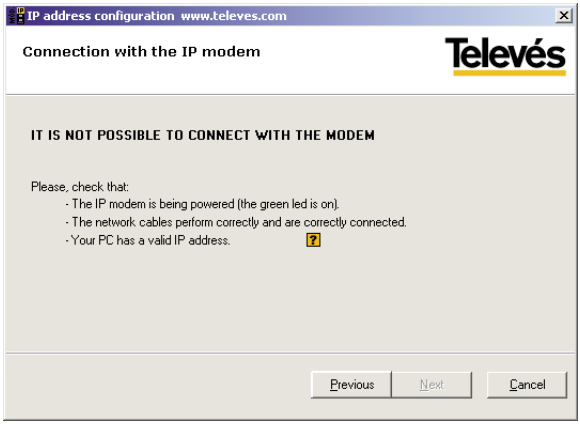
Once the connection has been carried out correctly, you can see the following screen. To carry out any operation, it is obligatory to enter the IP MODEM password, and this can be found on the label that comes with the installation CD. Two options are possible:

a) **Obtain an IP address automatically:** This option enables the IP MODEM to obtain a dynamic IP address automatically. Remember that this is the default setting.

b) **Configuration of a static IP address:** When this option is selected you can enter a static address for the modem, you must also enter all the basic network configuration data such as the “Subnet mask” and the “Gateway”.



If for any reason communication is lost with the modem during its configuration, the software will try three times to connect with it. If, after these attempts, it is impossible to establish communication with the modem, the following screen will be displayed:


IP address configuration www.televes.com
Connection with the IP modem
Televés
IT IS NOT POSSIBLE TO CONNECT WITH THE MODEM
Please, check that:
- The IP modem is being powered (the green led is on).
- The network cables perform correctly and are correctly connected.
- Your PC has a valid IP address.
Previous
Next
Cancel

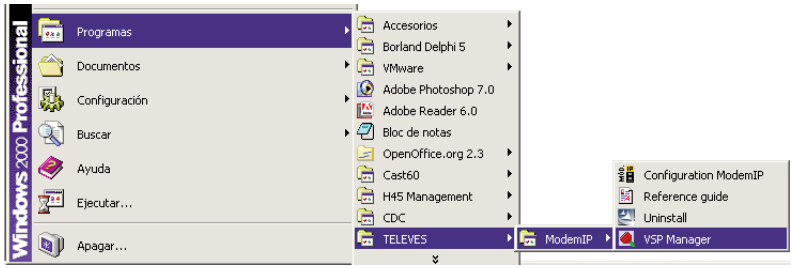
From this screen, you will be able to exit the program or try the connection again. Before attempting to connect, check that the cables are properly plugged in, and read the help that

appears when you click on the small **orange help box**.

CONNECTING TO A HEADEND

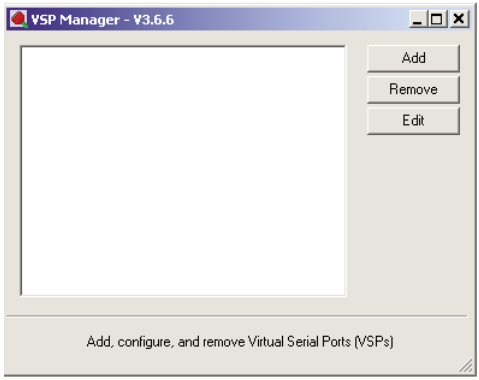
To connect to a headend, follow these steps:

A. Execute the “Vsp Manager” program:

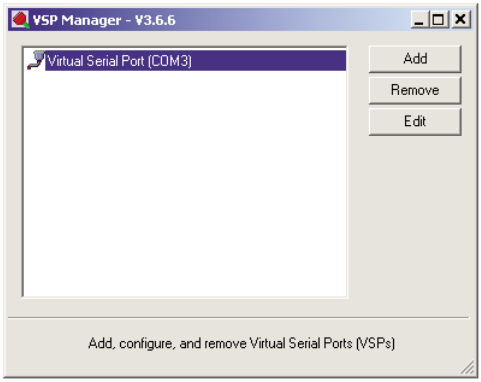


B. Make sure there is no file loaded in the “Vsp Manager”

- If there is no file loaded onscreen, it will appear empty, as you can see below:



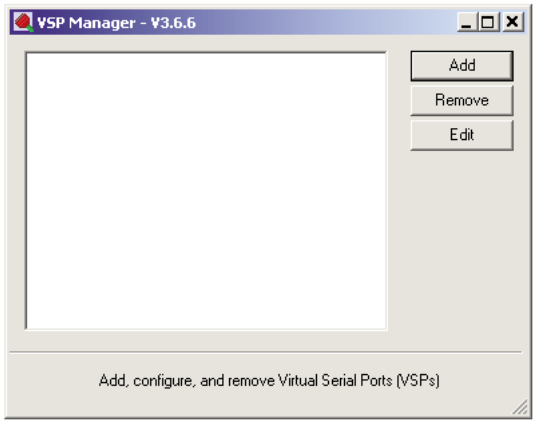
- If there is a connection file loaded, it will appear on the main screen, as can be seen in the following figure:



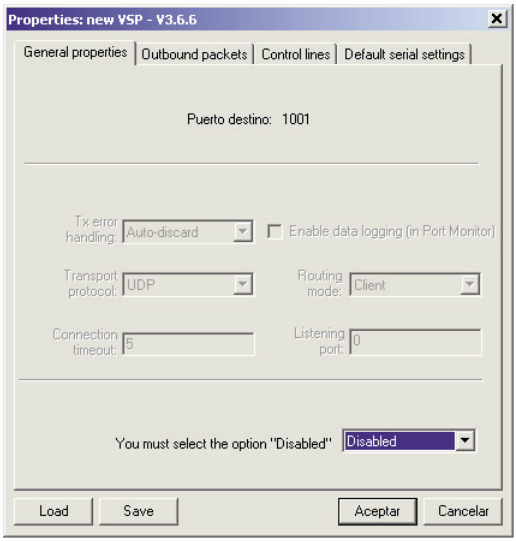
To erase it or the loaded connection files, select each one by clicking on “Virtual Serial Port.....” and then click on “Remove”, until the whole screen is empty.

C. Load the connection file in the "Vsp Manager". To do so, you must:

- Press Add

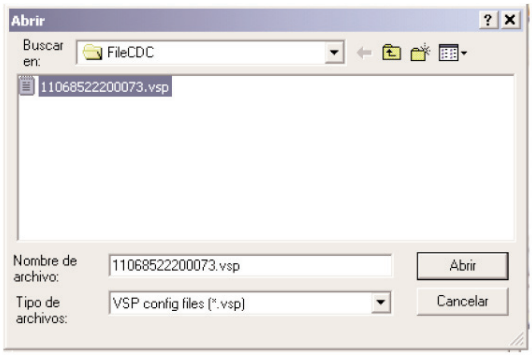


- In the following screen, press "Load"

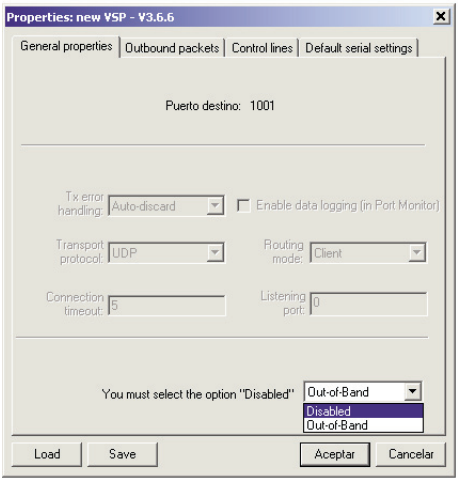


- At this moment, you will see the screen that is used to open a connection file. Do this by locating it in the directory where the software was installed (see INSTALLATION OF SOFTWARE), which will normally be "C:\Programfiles\TELEVES\ModemIP\FileCDC", where you will find all the connection files (extension ".vsp"). Remember that each

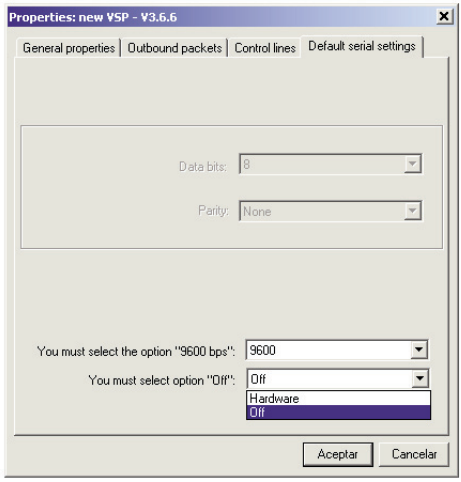
connection file ".vsp" lets you carry out a connection with a single MODEM (this is why it is advisable when installing the file to re-name it, using a more descriptive name of the installation where it will be located, but without changing the extension ".vsp"). Also to identify which file corresponds to which Modem, you must know that the file name is the serial number that the Modem has on the label at the back.



- Once the file tab "General properties" is open, you must select **"Disabled"**



- Next, in the "Default serial settings (this is how it appeared on the original" tab, you must select the 9600 options for bits per second (bps) and Off for the flow control.

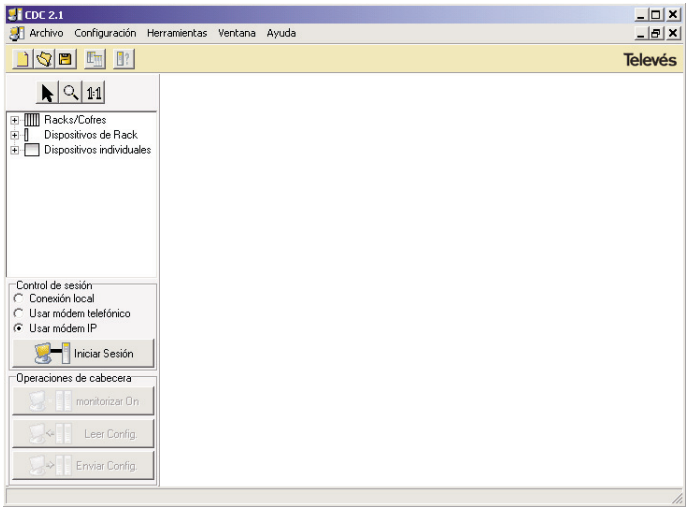


■ Press “Accept” and the close the VSP Manager by pressing ☒

Important: Remember that these steps must be repeated whenever you want to connect another IP Modem.

D. Start up the CDC software, by:

■ Making sure that the “Use IP Modem” option that appears next to the Session Log in button is enabled.



■ Press “Start session ”

Enter the headend password:

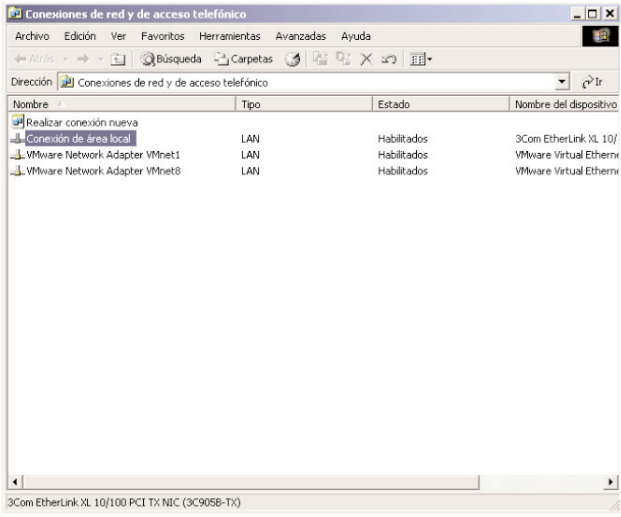
The headend is now connected.

ANNEX 0: SOLUTIONS FOR POSSIBLE CONNECTION PROBLEMS

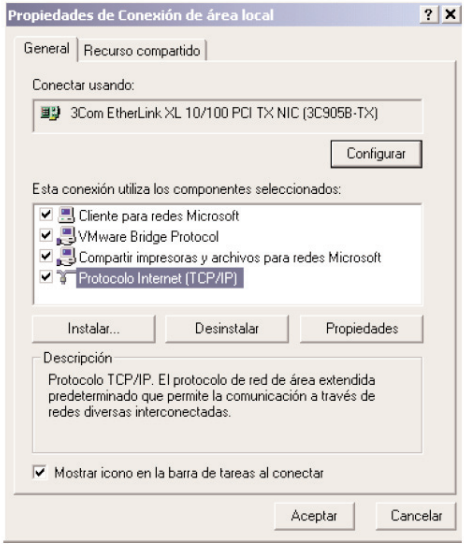
1.- Check that "dhcp" exists on your network and that IP addresses are provided; as we have already mentioned, the IP Modems have the "dhcp" enabled by default, so they take the IP address from the network. If you do not have a "dhcp" server, the IP Modem will not work.

If this is the case, start the "IP configuration software" again, after connecting the IP Modem directly to the equipment using the crossover cable that is provided. Once you arrive at the screen that appears on page 12 of this manual, select **"Configuration of a Static IP Address"**, and specify an IP address, a subnet mask and a gateway to the IP Modem as indicated.

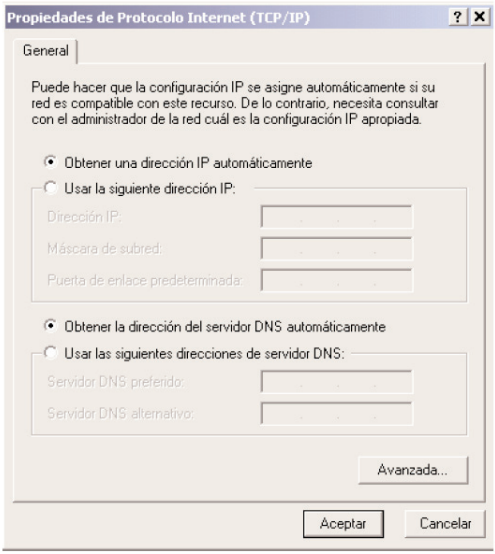
In any Windows XP system, to check that the dhcp is enabled, click on **Start >> Control Panels >> Network connections**. A screen, which will be very similar to this, will appear:


Conexiones de red y de acceso telefónico
Archivo Edición Ver Favoritos Herramientas Avanzadas Ayuda
Atrás Búsqueda Carpetas
Dirección Conexiones de red y de acceso telefónico
Ir
Nombre Tipo Estado Nombre del dispositivo
Realizar conexión nueva
Conexión de área local LAN Habilitados 3Com EtherLink XL 10/
VMware Network Adapter VMnet1 LAN Habilitados VMware Virtual Ethern
VMware Network Adapter VMnet8 LAN Habilitados VMware Virtual Ethern
3Com EtherLink XL 10/100 PCI TX NIC (3C905B-TX)

Right-click on "Local area connection", and press "Properties" on the list that appears, the following screen will be displayed:

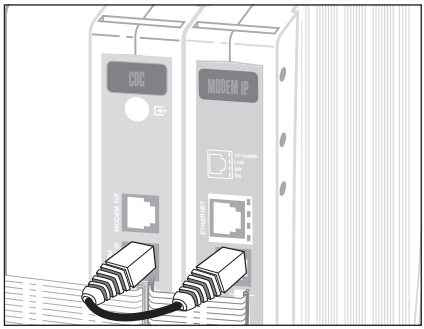

Propiedades de Conexión de área local
General
Recurso compartido
Conectar usando:
3Com EtherLink XL 10/100 PCI TX NIC (3C905B-TX)
Configurar
Esta conexión utiliza los componentes seleccionados:
Cliente para redes Microsoft
VMware Bridge Protocol
Compartir impresoras y archivos para redes Microsoft
Protocolo Internet (TCP/IP)
Instalar...
Desinstalar
Propiedades
Descripción
Protocolo TCP/IP. El protocolo de red de área extendida predeterminado que permite la comunicación a través de redes diversas interconectadas.
Mostrar icono en la barra de tareas al conectar
Aceptar
Cancelar

Select the highlighed option on the previous screen and press Properties which is also highlighted in the previous screen.


Propiedades de Protocolo Internet (TCP/IP)
General
Puede hacer que la configuración IP se asigne automáticamente si su red es compatible con este recurso. De lo contrario, necesita consultar con el administrador de la red cuál es la configuración IP apropiada.
Obtener una dirección IP automáticamente
Usar la siguiente dirección IP:
Dirección IP:
Máscara de subred:
Puerta de enlace predeterminada:
Obtener la dirección del servidor DNS automáticamente
Usar las siguientes direcciones de servidor DNS:
Servidor DNS preferido:
Servidor DNS alternativo:
Avanzada...
Aceptar
Cancelar

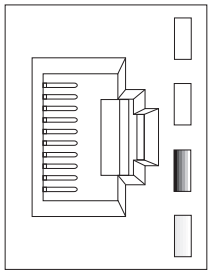
2.- Check the cables between the “IP Modem” and the “CDC”.

Check that the cables are connected between the “IP Modem” and the “CDC” as can be seen in the figure.



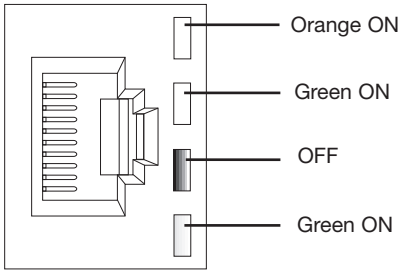
ANNEX 1: DETECTION OF POSSIBLE CONNECTION PROBLEMS AFTER OBSERVATION OF MODEM STATUS LEDS

The Status LEDS are located on the Connector marked as “ETHERNET”.



Important: The following explanation of the possible status of the LEDS is the usual one, but it may vary, depending on various factors.

■ In a correct operating mode the LEDS should be as follows:

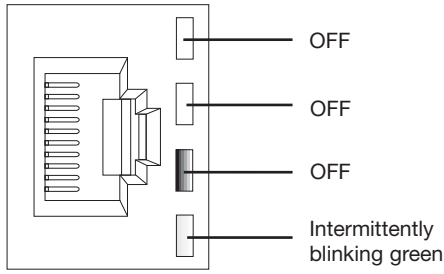


■ Modem does not detect the cable connection to the “ETHERNET” connector.

The possible faults may be:

- Physical fault in the cable connector . . . . . .
- Incorrectly inserted cable

In this case, the appearance of the LEDS is usually as follows:

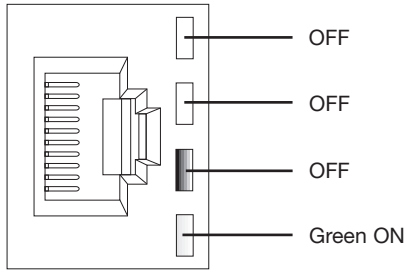


- No connection at the other end of a cable that is properly connected to an “ETHERNET” connector.

  The possible faults may be:

  - Physical fault in the cable connector
  - Cable incorrectly inserted at the other end
  - A break inside the cable

In this case, the appearance of the LEDS is usually as follows:



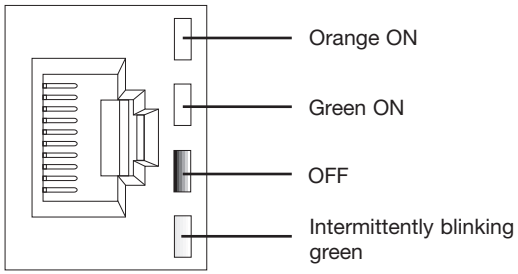
- Possible fault in the Internet connection, the Modem does not access Internet :

  Possible reasons:

  - ADSL Router is physically disconnected from Internet. Check physical router connections.
  - The Output Router does not permit the Modem to access Internet. Check Router configuration, making sure there is no blockage in port 6450, which is used by the Modem to access Internet. (See your Router Manual)

- If your network has a Proxy, you should check that the Proxy enables the Modem to access Internet through port 6450. (See instructions for your Proxy)
- Your network (LAN) works with fixed IP addresses, so there is no IP address server (DHCP), in this case you should check that the fixed IP address on the Modem is correct (within the rnage of your network). To configure a fixed IP address on the Modem, use the “IP Modem Configuration” Program supplied with the Modem.

In this case, the appearance of the LEDS is usually as follows:



TECHNICAL SPECIFICATIONS

The technical features of this product will correspond to those of its main component module, i.e:

Connectors	
CDC interface	Connector RJ45 (RS232, TX/RX)
Ethernet interface	RJ45 Ethernet 10/100 BaseT
Serial interface	
Serial interface	Levels RS232 (TX/RX)
Serial port specifications	Range 150-115200bps; Parity: None, even, odd 7 or 8 bits/byte
Routing buffers	
Size	12 Kbytes x 2
Power/Temperature	
Power requirements	max. 2.5W
Working temperature	max. 45ºC
Protection Index	IP20

The features of the EM202 module are:

Parameter	**EM202-00**
Ethernet interface	10/100BaseT Ethernet, standard magnetics
Serial interface and I/O lines	CMOS-level; TX, RX, and 4 additional I/O lines with RTS, CTS, DTR, DSR implemented
Router buffers size	12Kbytes x 2*
Maximum load curent of I/O lines	10mA
Power requirements	DC 5V, +/-5%, app.230 mA (in 100BaseT mode)
Device temperature during operation	+40 degrees C** (in 100BaseT mode)
Operating temperature	-10 to +70 degrees C
Operatind relative humidity	10-90%
Mechanical dimension (excl. leads)	App. 32.5x19x15.5 mm
Packing	Plastic tray, 30 modules/tray

*Maximum possible buffer size. Actual size may be smaller depending on how much RAM is “consumed” by the firmware.

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VAATIMUSTENMUKAISUUSVAKUUTUS

Manufacturer / *Fabricante / Fabricante / Fabricant / Fabbricante / Fabrikant / Κατασκευαστής / Tillverkare / Valmistaja:* **Televés S.A.**

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Reference / *Referencia / Referência / Référence / Articolo / Artikelnummer / Δήλωση / Referens / Referenssi:* **5837XX**

Description / *Descripción / Descrição / Description / Descrizione / Beschreibung / Περιγραφή / Beskrivning / Kuvaus:* **MODEM CDC-IP**

Trademark / *Marca / Marca / Marque / Marchio / Handelsmarke / Μάρκα / Varumärke / Tavaramerkki:* **Televés**

With the requirements of / *Con los requerimientos de / Com as especificações de / Avec les conditions de / Con i requisiti di / Die Voraussetzungen erfüllen / Με τις απαιτήσεις του / Enligt följande bestämmelser / Seuraavien määrityksien:*

- **EMC Directive 2004 / 108 / EC.**
- **Low Voltage Directive 73 / 23 / EEC amended by Directive 93 / 68 / EEC requirements.**

Following standards / *Con las normas / Com as normas / Selon les normes / Con le norme / Folgende Anforderung / Ακόλουθα πρότυπα / Följande standard / Seuraavien standardien:*

EN 60950-1: 2001 + A11: *Information technology equipment - Safety - Part 1: General requirements*
EN 55022: 1998 + A1: 2000 + A2: 2003: *Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement*
EN 55024: 1998 + A1: 2000 + A2: 2003: *Information technology equipment - Immunity characteristics - Limits and methods of measurement*

Santiago de Compostela, 19 de Septiembre de 2008

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